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# TWIN CAVES: AN EARLY MIDDLE STONE AGE SITE NEAR CLARENS, EASTERN FREE STATE*

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## ABSTRACT

The undated Middle Stone Age (MSA) assemblage from the south entrance of Twin Caves, on the farm Schaaplaats, Clarens, contains artefacts that link it to the earliest expression of the MSA. Using the Volman classification scheme this places the assemblage within the MSA I. Only four other South African sites have assemblages that can be considered MSA I.

## INTRODUCTION

Twin Caves are situated on the farm Schaaplaats, near the eastern Free State town of Clarens (28.34S; 28.27E). The linked caves are situated at the top of a hill overlooking a small perennial stream. The caves face due west and both measure 35 m by 30 m. One of the caves, that in the south, has Iron Age walling in it. The deposit is composed mainly of decomposed sandstone, which forms the bedrock of the caves.

The test excavation in the northern cave, which has no walling, is part of the Rose Cottage Cave Project which aims to find sites in the area with deep deposits and long sequences. Rose Cottage lies approximately 120 km south-west of Twin Caves.

## THE EXCAVATION

Excavation began near the dripline in the southern side of the cave. This choice was made because the front of the cave is well lit and has stone tools washing out of the dripline deposit. Excavation began in squares Aa-Ac (Fig. 1) and continued to a depth of 0,5 m. The first 50 mm consisted of a dung floor because the cave was recently used for sheltering goats and cattle. The following 450 mm showed no definite stratification and yielded only a few stone pieces which appeared randomly in the semi-sterile deposit. Square Ah, the surface of which was about 1,4 m lower than the excavated base of Ab, was also excavated. In Ah there was a sterile surface layer of 400 mm followed by a dense occupation level of 200 mm which rested on bedrock. All the artefacts from the excavation were derived from this one square. Although the excavation falls well within the dripline, the roof of the cave is extremely high at this point (15 m) making the site more an open one than a cave site (grass was growing vigorously on the surface). Five pottery fragments and one bone fragment were recovered from the surface. This is not surprising considering the proximity of the large Iron Age site in the adjoining cave.

## STONE ARTEFACTS

The artefacts were analysed using Singer and Wymer's 1982 scheme with the following amendments: first, I define flake-blades by size starting from 26 mm with increments of 10 mm and, second, flake-blades with lengths smaller than 26 mm are called bladelets.

A total of 850 stone artefacts was recovered (Table 1). There are no formal tools and only five pieces have visible utilization marks. Chunks comprise 60% of the lithic collection but no chips were present suggesting that these may have been winnowed from the site by the action of water. Flakes are the next most common artefact (21%), followed by cores (12%). Sixty-eight per cent of the cores are irregular but there are a few blade and disc cores. Most of the flakes are thick, broad and round in appearance (Fig. 2), and there are none of the triangular flakes that typify early MSA coastal assemblages (Singer & Wymer 1982). The flakes appear almost disc-like regardless of whether they are made on tuffaceous or opaline rocks. Eighteen per cent of flakes exhibit faceted platforms (Table 1, Fig. 2). Flake-blades make up a small (7%) and mixed collection varying in type and raw material (Table 1), and bladelets comprise only 0,5% of the total assemblage. Opaline makes up 59% of the rocks used at Twin Caves.

## DISCUSSION

The dense MSA site positioned at the entrance of the cave may have been disturbed by water action which removed the chips downslope.

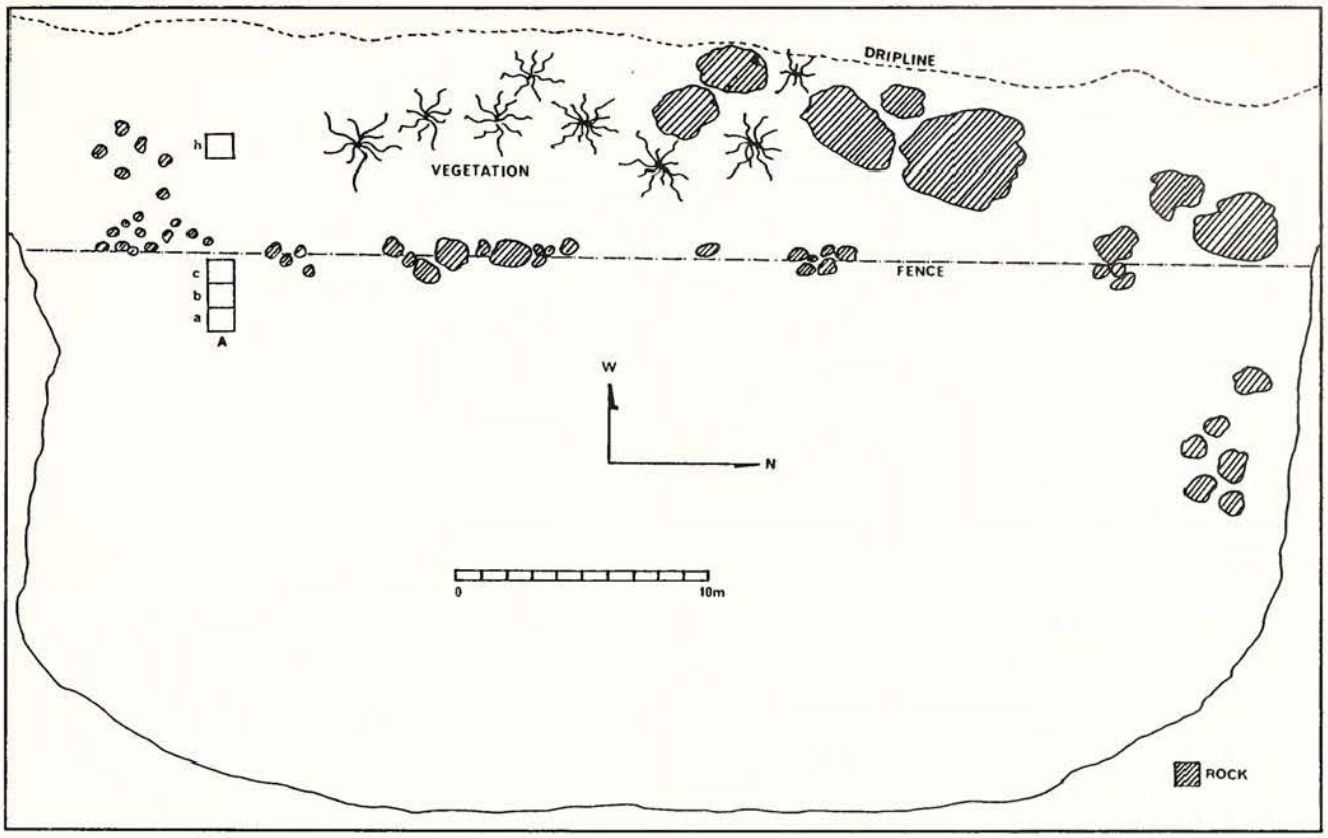


**Fig. 1: Plan of the southern cave, Twin Caves.**

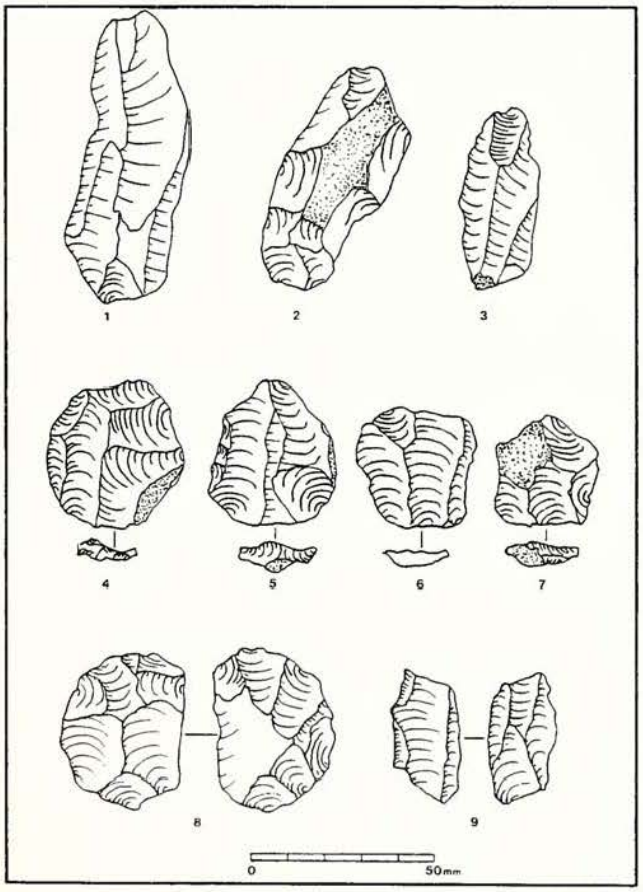


**Fig. 2: Stone Artefacts from Twin Caves: 1-3 flake-blades; 4-7 flakes.**

The artefacts are not easily placed into any of the 'traditional' MSA typologies. There is nothing resembling this collection in the entire Rose Cottage MSA sequence which, using Volman's 1984 terms, spans MSA 2a, Howieson's Poort, MSA 3 and a final expression of the MSA (Wadley & Harper 1990, Harper 1994). Both Twin Caves and Rose Cottage assemblages are manufactured predominantly on tuffaceous and opaline raw material, but the Twin Caves flakes and flake-blades are much larger and rounder than those found in any of the MSA levels at Rose Cottage Cave. In Rose Cottage only the basal level LEN, probably dated older than 100 000 BP, contains more large (>30 mm) than small flakes (Harper 1994). LEN, however, has fewer faceted platforms and more flake-blades than Twin Caves. Twin Caves also has far fewer bladelets than any of the Rose Cottage MSA levels.

If Volman (1984) is correct in his assessment of time-related technological change in the MSA then I suggest that, on the basis of tool typology, the Twin Caves MSA is older than the MSA occurrences at Rose Cottage and it may belong to the MSA I. MSA I is a problematic MSA stage that has been recognised at only a few South African sites: Duinefontein 2, Peers Cave, Elands Bay Cave and possibly Bushman Rock Shelter. These MSA I assemblages are characterized by little formal retouch, a high proportion of cores for the production of flakes with intersecting dorsal scars and small, broad flakes, some of which have faceted platforms. Denticulates are the most common retouched tools (Volman 1984:201).

At Twin Caves there are no formal elements, not even

Table 1. Twin Caves, Schaaplaats: stone inventory.

| | sandstone | tuffaceous rock | opaline | other |
|---|---|---|---|---|
| **Chunks** | 69 | 123 | 263 | 53 |
| **Cores** | | | | |
| disc | 6 | | | |
| blade | | 5 | 10 | |
| core reduced | | | 1 | |
| irregular | 1 | 8 | 68 | 1 |
| **Flakes (*faceted platform)** | | | | |
| <25 mm | | 10+2* | 41+8* | |
| 26-35 mm | 2 | 20+1* | 23+6* | 1* |
| 36-45 | 6+1* | 12+4* | 7+6* | |
| 46-55 mm | 5 | 9+4* | 2 | |
| >55 mm | 7 | 1 | | |
| **Flake-blades** | | | | |
| Parallel <35 mm | | 1 | 2 | |
| Parallel <45 mm | | | 1 | |
| Irregular <35mm | | | 8 | |
| Irregular <45mm | | 5 | 4 | |
| Irregular <55mm | | | 2 | |
| Irregular <65mm | 1 | | 1 | |
| Irregular >65mm | 1 | 3 | | |
| Pointed <45 mm | | | 1 | |
| Thick Triangular | | | | |
| <35 mm | | | 1 | |
| <45 mm | | 1 | 3 | |
| <55 mm | | 3 | 1 | |
| <65 mm | | 1 | | |
| Cortical <35 mm | | | 1 | |
| Cortical <45 mm | | | 2 | |
| Broken distal | | | | |
| Broken proximal | 1 | 2 | 2 | |
| Broken medial | | | 7 | |
| **Bladelets** | | | 4 | |
| **Utilised pieces** | | | 5 | |
| **TOTAL** | **100** | **215** | **480** | **55** |

denticulates, but there are disc cores and small, broad flakes, some of which have faceted butts. Opaline is used less frequently at Twin Caves than at Rose Cottage Cave where opalines usually comprise more than 90% of the rock types. The lowest percentage of opaline in the Rose Cottage Cave MSA is 80% in the pre-Howieson's Poort basal levels of the sequence. Nonetheless the proportion of opaline at Twin Caves is not low enough to explain the small flake-blade production.

Given the dating techniques presently available has not been possible to date the Twin Caves MSA assemblage. It is also not possible to seriate it relative to other MSA industries within the South African MSA sequence because it is a single assemblage within a single stratum. This makes the placing of Twin Caves within the MSA I stage controversial, particularly because some archaeologists (Parkington 1990) disclaim a time related, uniform sequence of industries in the MSA.

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